Editor's note: Appealed -- aff'd, Civ. No. 2111 (D.Mont. Jan. 19, 1973)

UNITED STATES OF AMERICA

v.

ELKHORN MINING COMPANY

IBLA 70-106 Decided June 27, 1971

Mining Claims: Contests

Where a contest is brought by the Government against a mining claim, its burden of proof extends only to going forward with sufficient evidence to establish a prima facie case; the burden then shifts to the contestee to show by a preponderance of the evidence that his claim is valid.

Mining Claims: Determination of validity

The derivation of revenue from fees paid by persons for the privilege of entering a mine to breathe air which contains radon gas released by the natural process of the decay of uranium is not a mining operation within the meaning of the mining laws, and such an activity does not constitute the discovery of a valuable mineral deposit essential to the creation of a valid mineral location.

IBLA 70-106	:	Montana Contest No. 1780
	:	
UNITED STATES OF AMERICA	:	Old Gold mining claim
v.	:	declared invalid; mineral
ELKHORN MINING COMPANY	:	entry cancelled
	:	
	:	Affirmed

DECISION

Elkhorn Mining Company has appealed to the Secretary of the Interior from a decision of October 13, 1969, by the Office of Appeals and Hearings, Bureau of Land Management, wherein the decision of a hearing examiner dated April 11, 1969, declaring the Old Gold lode mining claim null and void and cancelling mineral entry Montana 069745 was affirmed.

On March 1, 1965, the Elkhorn Mining Company filed at the Billings, Montana land office a mineral patent application (Montana 069745) for the Old Gold quartz lode mining claim.

Following examination of the claim, the United States filed a complaint on September 30, 1966, charging that:

> (a) Valuable minerals have not been found within the limits of the claim in sufficient quality and quantity to constitute a valid discovery.
>
> (b) The claim is not used in good faith for mining purposes.

In a decision rendered on April 11, 1969, the hearing examiner found the following to be significant facts.

Robert Newman, a mining engineer with the Bureau of Land Management, examined the claim on three separate occasions. He

took a total of 10 samples of which 7 were assayed for gold, silver, lead, and zinc, and 8 for uranium oxide. The values for the U_3O_8 (uranium oxide) ranged between 16 cents and 96 cents per ton. The values for the gold, silver, lead, and zinc fell between $4.37 and $7.98 per ton. It was Mr. Newman's opinion that the mineralization could best be mined by an underground operation that would minimally cost $25 per ton. The conclusion drawn by Mr. Newman from this data was that a prudent man would not be justified in the further expenditure of time and money on the claim with any reasonable expectation of developing a paying mine.

Another Bureau of Land Management employee, Parker Davies, a geologist, also had occasion to examine the claim. He agreed with Newman's evaluation of the claim. It was his opinion that, at best, the claim warranted the expenditure of high risk money to do some exploratory work.

Professor Kohler Stout, a very highly qualified mining engineer, testified on behalf of the contestee. He was in agreement with the two Government witnesses as to the dollar value of the assayed samples, but he disagreed with their interpretation of the "prudent man" test. It was his opinion that the claim warranted further exploration.

The other witness on behalf of the contestee was its president, Wade V. Lewis. It was his opinion, speaking both as a mining engineer and as president of Elkhorn, that a standard mining operation upon the claim would not be prudent. He explained that far greater profits could be derived from the charging of an admittance fee to the public for entrance into the mine for the purpose of breathing the radon contained in the mine atmosphere. To substantiate this contention, Mr. Lewis revealed that in the 11-year period from 1957 to 1967, the corporation had grossed $61,354.55 from mine visitors. The expenses from this operation were from $2,400 to $3,000 a year.

From this evidence the hearing examiner concluded that

> [A] person of ordinary prudence would not be justified in the expenditure of his labor and means in actually working the property and exploiting the mineralization that has been found within the limits of the claim ... (Opinion p. 3).

As to the question of whether Elkhorn's use of the mine could be considered mining under the laws governing lode mining claims (30 U.S.C. §§ 22, 23 (1964)), he held that

> [T]he ... claim has not and is not being used for mining purposes but for possible health purposes and that the property is not valuable for the mining and marketing of mineral substances but for the purpose of charging fees for admittance to the property. (Opinion p. 8).

In affirming the hearing examiner's decision, the Bureau of Land Management first held that the exposed mineralization on the claim did not constitute a discovery of a valuable mineral deposit. It also held that radon was not a locatable mineral within the meaning of the mining law, and that the inhalation, by paying customers, of the atmosphere of a mine which contains radon gas is not consistent with the concepts of mining manifested by the Mineral Laws of the United States. It stated:

> Radon was described at the hearing as being a transmuted element in the chain of products created by the natural disintegration of uranium, and occurring in a gaseous state. The Dictionary of Mining, Mineral and Related Terms, published in 1968 by the Bureau of Mines, U.S. Department of the Interior, provides these definitions for radon:
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> > Radon, radium emanation
> >
> > a. A heavy, radio-active, zerovalent gaseous element; in group O (inert gases) of the periodic table formed by the disintegration of radium. Used similarly to radium in medicine. Symbol, Rn; atomic number, 86; mass number of most stable isotope (atomic weight), 222; density of gas, 9.73 grams per liter; melting point, -71 degrees C.; and boiling point, -61.8 degrees C. Webster, 3d Ed.; Handbook of Chemistry and Physics, 45th Ed., 1964.

> b. Radon is the heaviest known gas. Colorless as a gas; yellow to orange-red, phosphorescent, opaque crystals; specific gravity of liquid, 4.4 (at -62 degrees C.); and of solid, 4.0; soluble in water; and slightly soluble in alcohol and in organic liquids. All 18 known isotopes from radon 204 to radon 224 are radioactive. Radon 222; emanates from radium, half-life, 3.823 days; and an alpha particle emitter; radon 220 or thoron; emanates from thorium, half-life 54.5 seconds; and an alpha particle emitter; and radon 219 or actinon; emanates from actinium; half-life, 3.92 seconds; and an alpha particle and a gamma ray emitter. One part of radon exists in 1 sextillion parts of air. Handbook of Chemistry and Physics, 45th Ed., 1964.

The Bureau of Mines, in its publication Mineral Facts and Problems, Bulletin 630 (1965 Ed.), states that radon is a highly radioactive gas derived from the disintegration of radium, and that continued ingestion of radon and its daughter products creates a serious health hazard, citing Public Health Service studies.

From the manner of occurrence of radon, as a gas under ordinary temperatures and pressures, and because of its short half-life, and with no apparent use in commerce or industry, we cannot consider it to be a mineral locatable under the mining laws. The claimant has not shown that it has removed radon, per se, and marketed it, nor that the radon, as a mineral or at all, can be extracted, removed and marketed at a profit. Rather, the claimant has shown only that it has profited from charging admission to persons who enter the adit on the claim, and has contended that the breathing of radon in the atmosphere of the adit constituted removal of the radon, or at least, beneficial use of the radon on the premises during its relatively short half-life. Charging admission to persons to enter the adit is not a development of the mineral

> deposit as contemplated by the mining laws, even though a profitable operation apparently has ensued. The profit has come not from mining operations....

In its appeal from the Bureau of Land Management's decision, appellant raises eight specific points of error. Each was raised in substantially the same form below, and each will be dealt with here in turn.

Appellant first contends that the burden of proof in these contests is upon the contestant and that in this case, the Government "has failed to prove its case by preponderance of the evidence, or at all."

Appellant is mistaken. In Foster v. Seaton, 271 F.2d 836, 838 (1959), the applicable rule was set forth:

> [W]hen the Government contests a mining claim, it bears only the burden of going forward with sufficient evidence to establish a prima facie case, and ... the burden then shifts to the claimant to show by a preponderance of the evidence that his claim is valid.... Were the rule otherwise, anyone could enter upon the public domain and ultimately obtain title unless the Government undertook the affirmative burden of proving that no valuable deposit existed.

The testimony given and the conclusions drawn by Newman and Davies that no valuable mineral deposits existed on the claim established the Government's prima facie case. United States v. A.P. Jones, 2 IBLA 140 (1971). See also, United States v. Ford M. Converse, 72 I.D. 141 (1965), aff'd sub nom. Converse v. Udall, 399 F.2d 616 (9th Cir.1968), cert. denied, 393 U.S. 1025 (1969).

Appellant raises in this appeal, as he did below, the contention that "the decision was arbitrary, capricious, and an abuse of discretion and not in accordance with law." From the face of the record, this claim appears completely to lack merit. Since appellant has not proffered examples of the abuses and indiscretions to which it alludes, the contention must be dismissed.

Appellant next contends that the decision below failed to recognize the widely accepted scientific fact that radon is a mineral. It was held below that radon, because of its occurrence as a gas with a very short half-life and with no apparent industrial or commercial use, could not be deemed a mineral under the existing mining laws.

At the hearing, there was conflicting testimony on this issue. It is our opinion that that issue need not be resolved in reaching a decision in this case. The issue here is whether the inhalation of radon by individuals who pay for admittance into a mine adit constitutes the type mining under the applicable laws of the United States for which a patent should issue to those who are profiting from the venture. If it does not, then for our purposes it does not matter whether radon is or is not a locatable mineral.

Appellant's next two contentions raise this issue. It says first that the showing by Mr. Lewis that over $61,000 had been grossed through the above-described use of the mine satisfies the "prudent man" and "marketability" test. It then says that the hearing examiner rejected the validity of its mining claim not upon the basis of the ability profitably to extract minerals, but upon the method of extraction. It is undisputed that Elkhorn has been able to derive some profit from its operation. However, not every profitable enterprise conducted upon the public lands entitles the entrepreneur to a patent under the mining laws in the United States. The expenditure of means and labor must be for the benefit of a mining operation from which minerals can be extracted and marketed. The marketed commodity must be the product of this mining operation. The appellant is quite correct in its contention that the validity of a claim is not dependent upon whether "... the mineral is taken by blasting, natural seepage, leeching, precipitation or ... breathing...." If the patent applicant has a good faith intention to develop the claim as a mining operation under the applicable laws of the United States, his application should not be denied solely because he utilizes an unconventional method for extracting the minerals. On the other hand, the lands in question cannot be utilized for purposes other than mining.

In this case persons suffering from arthritis who believe they could benefit from the inhalation of radon gas found within the Old Gold mine atmosphere are charged an admission fee and then led into the mine adit where they breathe the "cure". Although the appellant alleges that those who avail themselves of the opportunity to visit the mine report that they derive benefits from being in the radon enriched atmosphere, it does not claim that the visitors remove the radon with them when they leave the mine. In fact it has stated in its briefs and exhibits (Ex. A, Wade V. Lewis, Radioactivity and Arthritis, 106 (Rev.Ed.1964) that the visitors breathe out almost as much radon as they breathe in. It points out that radon is only one element of the uranium decay series, that it immediately follows radium in the uranium series, that it is in reality merely a vehicle for or transmutation medium for several elements that are solids--polonium, thallium, lead--which result from the breakdown of radon.

It says that a visitor carries out of the mine a minute amount of the radioisotopes of the solid elements which have been absorbed in his bloodstream (Ex. A, p. 106). There was no proof of the amounts of solid elements actually absorbed and removed by an hour's stay in the mine.

In other words, the visitor derives whatever benefit there is to be had from his brief exposure to the atmosphere of the mine adit. That any mineral is utilized or removed has not been established. The operation is much more akin to touring a cavern 1/ or viewing a canyon 2/ or bathing in a mineral spring, 3/ --none of which are mining operations--than it is to the activity the mining laws sought to foster and reward by the grant of a patent. We cannot find that this procedure constitutes the conduct of a mining operation.

Appellant's sixth contention that the value placed upon the mining operation by the Government was based upon the amount of mineral extracted is clearly unfounded. So too is its contention that the Government failed to carry its burden of proof. That assertion was dealt with above.

Elkhorn's eighth and final reason for appeal is that the author of the decision below "misunderstood" and "misapplied" the scientific facts involved in this case. They direct our attention to various exhibits prepared by Mr. Lewis for our elucidation as to the proper inference to be drawn from these facts. We have examined the materials and cannot agree with appellant. The testimony and exhibits clearly indicate that the decision below was correct.

1/ South Dakota Mining Co. v. McDonald, 30 L.D. 357 (1900).

2/ "It was never contemplated or intended that public lands might be possessed and held and title thereto acquired under the mining laws for purposes or uses nonessential to mining, or mining operations." Grand Canyon Ry. Co. v. Cameron, 36 L.D. 66, 71 (1907).

3 Act of March 3, 1925, 43 U.S.C. s 971 (1964).

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior (211 DM 13.5; 35 F.R. 12081), the decision appealed from is affirmed.

Martin Ritvo, Member

We concur:

Anne Poindexter Lewis, Member

Edward W. Stuebing, Member